The Value of Safe Patient Handling
Connecting the Dots to Quality Indicators & Injury Reduction

2013 American Nurses Quality Conference Atlanta, GA
• The Value of Safe Patient Handling
• Address complications related to immobility and opportunities to improve patient outcomes
  – We face challenges related to patient falls, facility-acquired pressure ulcers, and complications associated with patient immobility
• Explore cause and prevention of caregiver injury
  – Caregiver injury due to unsafe manual handling of patients is occurring at a high rate and has a significant financial impact
• Participate in safe lifting and moving tasks using lift equipment
  – Rotate through four lifting stations and discuss safe lifting techniques with the station expert.
THE VALUE OF SAFE PATIENT HANDLING & YOUR GOALS...

Implementing a safe patient handling program can significantly impact operations:

• Patient Outcomes
• Pressure ulcers, Fall Prevention, Satisfaction Ratings, Care for the Bariatric Patient
• Nursing Productivity & Satisfaction
• Efficiency, time at the bed side, injury rates, morale, retention, recruitment and career longevity.
• Administrative Challenges
• Legislative compliance, community image, Employer of Choice, The Joint Commission, Magnet Journey, OSHA IR, DART, and OSHA surveys
CURRENT PRACTICE INCLUDES MANUAL LIFTING
DOES THIS LOOK FAMILIAR?  IS THIS REALLY SAFE?
WHAT DOES SPH MEAN TO THE CAREGIVER?

• A major area in need of improved safety is that of patient handling. **Nurses lift an estimated 1.8 tons per 8 hour shift.**

• NIOSH recommends 35 pounds as the safe lifting limit for healthcare workers.

• Every day, staff make the unconscious trade-off to take on more personal risk for the immediate benefit of the patient, to avoid interrupting others, or to avoid using specialty lifting equipment not immediately available at the bedside.

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THE CHALLENGE: CAREGIVER INJURIES RELATED TO PATIENT HANDLING IS HIGH

• In 2010, nursing aides, orderlies, and attendants experienced¹
  – An incident rate of 249 cases/10,000 full-time workers for musculoskeletal disorder (MSD) cases with days away from work
  – 27,020 MSD cases with days away from work
  – An incident rate of 283 cases/10,000 full-time workers for nonfatal occupational injuries and illnesses involving days away from work

• 62% indicated that suffering a disabling musculoskeletal injury was one of their top 3 safety concerns
• 56% experienced musculoskeletal pain that was caused/made worse by job
• 80% of nurses reported working despite experiencing frequent musculoskeletal pain
THE CHALLENGE: THE FINANCIAL IMPACT IS SIGNIFICANT

- In 2009, overexertion injuries caused by excessive lifting, pushing, pulling, holding, carrying, and/or throwing were the most expensive serious nonfatal workplace injuries, costing an estimated $12.75 billion in workers’ compensation costs\(^1\)
- **$37,154** is the average cost of a lower back injury claim\(^2\)
- **435,180** lost-time musculoskeletal injury claims were filed by healthcare workers in 2005\(^3\)
- High injury rates could be linked to higher staff turnover rates\(^3\)

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THE CHALLENGE: MANY BODY SYSTEMS CAN BE ADVERSELY AFFECTED BY PROLONGED IMMObILITY

**Potential Complications of Immobility**

**Respiratory:** pneumonia, atelectasis, and pulmonary embolism

**Cardiovascular:**
- postural hypertension,
- cardiac muscle atrophy,
- and deep vein thrombosis

**Metabolic:** glucose intolerance and negative nitrogen balance

**Neurological:** depression and anxiety

**Musculoskeletal:**
- osteoporosis,
- muscle atrophy and weakness,
- and contractures

**Renal:**
- calculi and nephritis

**Gastrointestinal:**
- constipation and fecal impaction

**Skin:** pressure ulcers

THE CHALLENGE: FACILITY-ACQUIRED PRESSURE ULCERS

• The current prevalence of pressure ulcers is high\(^1\)
  – 1 in 10 patients in acute care experience a pressure ulcer, and almost 1 in 20 patients develop a facility-acquired pressure ulcer
  – In the long-term acute care setting, the risk rises to nearly 1 in 4

• Because the Centers for Medicare & Medicaid Services no longer pays for care associated with stage 3 and 4 facility-acquired pressure ulcers, pressure ulcers can have a significant financial impact\(^2\)

• Mobilization of patients is recommended to help prevent pressure ulcers and might include adherence to 2-hour repositioning schedules\(^3\)

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PATIENT HANDLING METHODS THROUGH THE PROGRESSIVE MOBILITY® PROGRAM

HORIZONTAL TRANSFERS

SITTING TRANSFERS

WALKING / AMBULATION

REPOSITIONING

STANDING ASSESSMENTS
THE SOLUTION: PROGRESSIVE MOBILITY® PROGRAM THAT INCLUDES...

• Turning Q2H & Early Progressive Mobility® Programs
• Are patients being turned as frequently as needed?
• What type of lift equipment is needed to safely turn the patient?
• What triggers turning? Drop down in chart?
• Is using a turning team an effective strategy?
• How frequently should patients be turned?
• What if the patient is on a special mattress or bed?
• What if there are pressure ulcers on all of the patients’ turning surfaces?
• What if the patient is too unstable for turning?
• Physical Therapy support of progressive mobilization
THE CHALLENGE: MANY PATIENTS EXPERIENCE A POTENTIALLY EXPENSIVE FALL DURING THEIR HOSPITAL STAY

3%-20% of patients fall at least once during their hospital stay

Inpatient falls may result in excess charges of more than $4000 per hospitalization

Injuries from falls are no longer reimbursed under CMS guidelines

Hospitals must absorb the costs associated with the treatment of fall injuries

Most adult patients in healthcare settings are considered to be at high risk for falls

CMS=Centers for Medicare & Medicaid Services.
THE SOLUTION: RECOGNITION OF THE IMPORTANCE OF PREVENTING PATIENT FALLS, GUIDELINES, AND TECHNOLOGY

- The Joint Commission identified reducing the risk of falls as one of its national patient safety goals\(^1,2\)
- The US Department of HHS Partnership for Patients set a goal for hospitals to reduce the number of preventable fall injuries by half by 2013\(^3\)
- Hospitals that qualify for value-based purchasing are at risk of losing 1% or 2% of inpatient Medicare payments if they do not perform well based on metrics, including patient falls\(^3-5\)

- Lift technology for early ambulation can help you make the first step a safe step

- Falls benchmarks are required for Magnet Recognition Program® status applications\(^6\)

- The American Geriatrics Society/British Geriatrics Society clinical practice guidelines for the prevention of falls recommend screening, assessment, and interventions\(^7\)

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HHS=Health and Human Services.

Potential barriers to the implementation of safe patient handling programs include\textsuperscript{1,2}

- Financial constraints
- Reluctance to accept changes
- Competing priorities among management

Potential barriers to the implementation and maintenance of safe patient handling programs must be overcome

### THE SOLUTION: A COMBINATION OF GUIDELINES, POLICIES, AND TECHNOLOGY

#### NIOSH
- Lifting equation yields a recommended maximum weight limit of 35 lbs for use in patient handling tasks\(^1\)
- Weight limit is even lower when tasks are performed under challenging circumstances\(^1\)
- When a patient handling task might exceed the weight limit guidelines, assistive lifting equipment should be used\(^1\)

#### VHA
- Established policies for the implementation and maintenance of safe patient handling programs\(^2\)
- Created algorithms that provide guidance for safe patient handling best practices\(^3\)

#### PHAMA
- The PHAMA paper, written by The Facility Guidelines Institute, provides\(^4\)
  - Guidelines regarding selection of lifting and transfer devices
  - Recommendations for safe patient handling equipment needs

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**NIOSH**=National Institute for Occupational Safety and Health; **PHAMA**=patient handling and movement assessments; **VHA**=Veterans Health Administration.

• At one institution, implementation of a safe patient handling program has shown a **reduction in workers’ compensation costs by 40%** and lead to an increase in employee satisfaction

• Selecting proper equipment, providing education, and implementing safe patient handling program processes have been shown to **reduce costs**

• Implementation of a back injury prevention program has been shown to **decrease workers’ compensation costs**

• Implementation of a safe patient handling and movement project has been shown to be **cost-effective**

• Implementation of a ceiling lift program in an extended care facility has been shown to **generate economic benefits due to reduced workers’ compensation costs** within 3 years of intervention

THE US GOVERNMENT IS PLAYING A LARGER ROLE IN PREVENTING CAREGIVER INJURY AND PROMOTING SAFE PATIENT HANDLING

<table>
<thead>
<tr>
<th>OSHA</th>
<th>State Legislation</th>
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| • Addresses safe patient handling with general-duty clause requiring every employer to provide a safe and hazard-free work environment\(^1\)  
  - Musculoskeletal injuries related to patient handling are reported and recorded in the OSHA 300 logs  
• Developed a set of guidelines for nursing homes in 2003 that are designed to prevent MSDs\(^1\)  
• Launching national initiative for increased inspections of nursing home and resident care facilities\(^2\)  
  - Focus areas include back injuries resulting from resident handling or lifting | • Many states created legislation mandating safe patient handling initiatives\(^3\)  
  - Safe patient handling laws have been enacted in 10 states  
  - Additionally, Hawaii has passed a resolution supporting safe patient handling |

Caregiver injury due to patient handling is receiving increased government attention

OSHA=Occupational Safety and Health Administration.

• The American Nurses Association is currently developing national interdisciplinary safe patient handling standards to help hospitals and other healthcare employers develop safe, effective, and enduring programs.

• The standards were available for public comment in October 2012, with a release planned for Spring 2013.

• To establish a safe environment for nurses and patients, the American Nurses Association supports actions and policies resulting in the elimination of manual patient handling.

1. Create a Culture of Safety
2. Implement and Sustain a SPHM Program
3. Incorporate Prevention through Design: Providing a Safe Environment of Care
4. Select, Install, and Maintain SPHM Technology
5. Establish a System for Education, Training and Competency
6. Incorporate Health Care Recipient Centered Assessment, Care Planning, and Use of Technology
7. Include SPHM in Reasonable Accommodation and Post Injury Return to Work
8. Establish a Comprehensive Evaluation Program
**CLINICAL SITUATIONS: LIFTING SOLUTIONS USING LIFT TECHNOLOGY**

| IN THE BED | • Repositioning  
|           | • Side-to-side turning  
|           | • Limb lifting  
|           | • Linen changes  
|           | • Hygiene procedures  
|           | • Posterior assessment  
|           | • Catheter insertion  
|           | • Horizontal transfers  

| UP FROM THE BED | • Sitting out of the bed  
|                | • Bed-to-wheel chair  
|                | • Bed-to-chair  
|                | • Bed-to-commode  
|                | • In-chair repositioning  
|                | • Standing assessment  

| OUT OF THE BED | • Ambulation / Walking  
|               | • Standing Assessments  

**Totally Dependent**

**Dependent / Not Ambulating**

**Ambulating**
DIGNIFIED CARE FOR PATIENTS OF SIZE (BARIATRICS)

• Sling application with low-friction sheets
• Seated lifting for repositioning sheet application/changes, bed linen
• Use of limb straps during sling application
• Safe ambulation
• Skin folds & hygiene
• Lifting pannus
• Comfort needs met
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Challenges...

- Childhood obesity
- Pressure ulcers
- Lower leg ulcers
- Preplanning for care
- Care across the continuum
- Panniculectomy
- Bariatric weight loss surgery
- And more...
The Triad of
Hazards of immobility
Immobility and obesity

- Endocrine
- Cardiac
- Vascular
- Respiratory
- Musculoskeletal
- Gastrointestinal
- Integumentary
- Emotional
Integumentary

- Largest organ of the body
- Greater pressure
- Less vascularity in adipose tissue
- Greater friction and shear
- Skin to weight ratio – perspiration
- Untreated dermatitis
- Urinary incontinence
- Atypical pressure ulcers
Atypical pressure ulcers

- Skin folds
- Tubes and catheters
- Hip ulcers
- **Buttocks ulcers, buttock cleft, lower back**
Economic hazards

• Non-reimbursable events including readmission (CMS 2008)
• Liability risk
• Satisfaction
• Issues of retention and recruitment
• Threat to caregiver safety
Implications to safe patient handling?

“Patients with a BMI greater than 35 comprised only ten percent of the patient population, however handling patients with a BMI greater than 35 was associated with 29.8% of injuries, 27.9% of lost time, and 37.2% of restricted time. In this study lifting, turning and repositioning was usually performed using biomechanics and not equipment. Therefore, with increasing body weight and weight maldistribution of both patients and their caregivers, challenges inherent in lifting, moving and repositioning the larger, heavier patient lends to hazards of immobility.”

Understanding the All-New Paradigm
What is progressive, early mobility?

“Series of planned movements in a sequential manner beginning at a patient's current mobility status with the goal of returning to baseline”
How can this be done successfully?

• Mobility team/mobility coach
• Four-step action plan
  – Task force
  – Criteria-based protocol
  – Training
  – Outcomes
• Rethink success...don’t forget Deming!
Pre-planning

• Challenges of immobility
  – Caregiver injury
  – Patient safety

• Comprehensive effort
  – Task force
  – Preplanning tools
  – Education
  – Outcomes
Case study

Jenna, a 61-year-old woman with a BMI greater than 90 (240 kg and 5’4”) was admitted to the critical care area with skin tears, a pressure ulcer, severe COPD, morbid obesity, sleep apnea, renal failure and numerous other co morbidities.
Case study

She had been bed bound for years at home with attentive family care, which addressed her physical, emotional and social needs. Advanced directives indicated she and her family wanted “everything done.”

- Shaver J & Camden SG. Promoting dignity and preventing caregiver injury while caring for a morbidly obese woman with skin care challenges. Bariatric Nursing and Surgical Patient Care. 2006 in press.
Within 15 minutes of admission two caregivers were injured....
Case study

• Lateral transfer device was used for transfers
• Full body lateral rotation support surface was used as an adjunct for turning/repositioning
• Sling-type lift was used to lift the patient from the bed
Case study

• Regardless of the time of day four people were always involved in turning or moving the patient

• Clinical experts
  – Pulmonologist, pain CNS, WOCN, social worker, ergonomist, dietician, physical therapist and more...
Case study

• Challenges
  – Dignity
  – Accommodation, supportive friends and family members,
  – Prevention of immobility-related complications including attention to skin integrity and airway

• Prevent caregiver injury among aging staff members.
Case study

Two days before the patient’s death over 30 people were at the bedside providing emotional support. Despite progressive deterioration of the patient’s physical condition, the pressure ulcer did not deteriorate, the skin tears healed completely this became...
Case study

• ...a satisfaction study
  – No further injuries
  – Satisfaction narratives
  – Reverse performance improvement project
More reading


ELSEVIER 2012 BOOK OF THE YEAR
More reading


More reading

• Gallagher SM. Safety, the nursing shortage and the bariatric nurse: is this an ethical debate? *Bariatric Nursing and Surgical Patient Care*. 2012;7(1):10-12.


More reading


• You entered the healthcare field to care for patients, and to ease pain and suffering.
• You entered the healthcare field to use your brain not your back.
• You are here today to learn how to safely lift and manage patients of all sizes so you can provide excellent care without hurting your back, shoulder, or co-worker.
• I hope you make the next move a Safe Move for you and your patient.
REFERENCES


REFERENCES (CONT.)


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